



# TAAT Water Enabler Compact

## Highlights

- **1,757 farmers and extension agents were trained in the water technologies**
- **Wheat farmers' yields increased on average by 60% in Sudan, Nigeria and Ethiopia**
- **28 demonstration sites for water solutions were developed in 6 countries**

## What is the problem?

Smallholder farmers across sub-Saharan Africa rely almost solely on rain fed agriculture. Only 4 to 7% of the region's arable land is irrigated. Inadequate and unreliable water supplies severely limit farmers' possibilities for intensifying crop production and enhancing their resilience in the face of drought, rainfall uncertainty and climate change. For this reason, many growers are eager to gain the technical expertise and equipment needed to secure water for their crops and explore irrigation technologies and water conservation. Research shows that there is enormous potential for expanding irrigation in SSA because groundwater in the 13 countries in SSA that were assessed is not widely utilized. By tapping into this resource irrigated area can be expanded a 120-fold to 13.5 million hectares. This expansion could improve the livelihoods of approximately 40% of the rural population.

## Compact description

TAAT-Water Enabler Compact (TAAT-WEC) focuses on irrigation and agricultural water management solutions for small-scale farmers that enable sustainable productivity increase. In line with its commitment to a water-secure world, TAAT-WEC gives access to small-scale farmers with low-cost irrigation and water management technologies. No 'one solution fits all' exists and the Compact promotes farmer-led initiatives to enable producers to opt for appropriate technologies for their agricultural fields that increase crop yields and profitability of their farming activities.

## What are TAAT Water Objectives we set?

- Enable the TAAT commodity compacts with water solutions

- Build the capacity of a cadre of trainers, extensions agents, champion farmers, youth service providers
- Attract investments from public and private sector sources for small-scale irrigation development
- Assess the enabling environment and provide policy recommendations that enhance the scaling of water solutions to small-scale farmers.

## What are the TAAT Water Technologies?

- Irrigation Water Development
- Irrigation Water Application
- Irrigation Scheduling
- In-Situ soil moisture conservation techniques.

## What have we achieved so far?

- 1,757 farmers and extension agents were trained in the water technologies in six different countries in Africa
- 28 demonstration sites were developed in 6 countries (Mali, Burkina Faso, Sudan, Ethiopia, Malawi and Nigeria) with 40+ technologies being implemented
- 3,655 farmers were exposed to water solutions during farmer field days and exchange visits held around the demonstration sites
- Wheat farmers' yields increased on average by on average by 60% in Sudan, Nigeria and Ethiopia. In Ethiopia water use decreased 18%. Water productivity increased 119% in Sudan
- Shallow tube wells, conveyance systems, water lifting, and rice improved varieties led to expansion of cultivated area of rice in the off-season, agricultural intensification and diversification of income among small-scale farmers in Mali, Burkina Faso and Nigeria.



A modern pressurized water conveyance distribution system in demonstration site in Alkamawah, Kano State, Nigeria.

## Were there any key challenges or lessons learned?

- Creating resilience among rural population, especially in fragile regions with low rainfall requires investments in water solutions, which increase profitability of agriculture
- Irrigation is attractive to young farmers and service providers and create high-end technical jobs
- Technology toolkits with TAAT-WEC water solutions boost crop productivity and income



Laying the pressurized PVC pipe distribution system in Nasarawa (PHOTO Henry Igbadun)

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